



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Lt. Governor

BOB MARTIN
Commissioner

March 12, 2014

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Passaic River Remediation
Focused Feasibility Study and Preferred Plan

Dear Administrator McCarthy:

I write today to urge you in the strongest of terms to promptly finalize and release USEPA's long-awaited Focused Feasibility Study (FFS) and Proposed Plan for the lower 8 miles of the Passaic River that describes the preferred remedy of dredging and bank-to-bank capping (Alternative 3) with off-site treatment and disposal of the dredge material at a hazardous waste landfill (Disposal Option B). Of particular importance, as justified by the detailed bases that follow below, is the necessity for USEPA to eliminate from consideration the disposal option that involves construction of a Confined Aquatic Disposal facility in the Newark Bay. Governor Christie previously rejected that option in the attached 2012 letter to then-Administrator Lisa P. Jackson.

The use of a Confined Aquatic Disposal (CAD) facility as a disposal option cannot be implemented and cannot be put forth in USEPA's preferred remedy as outlined in the Proposed Plan for the following reasons:

- A CAD for disposal of the required volume and concentration of dioxin-contaminated dredge material is unprecedented;
- The State is the riparian owner of the land underlying the Passaic River and Newark Bay and has rejected the CAD;
- Administrative Infeasibility precedent from the Hudson River Project supports the State's rejection of the CAD; and
- The President's power under CERCLA to use eminent domain needs State acceptance, which will not be provided.



The health and safety of the citizens of New Jersey and our shared obligation to those citizens to protect their environment fully justify the course I advocate.

NJDEP staff has worked closely with Region 2 to develop the FFS for a number of years. I, personally, have conferred on numerous occasions with Regional Administrator Judith Enck and I am gratified that we share the same environmental and public health and safety goals for the cleanup of the Passaic River. As you may know, the Passaic is one of the most contaminated rivers in the United States and is often considered the worst dioxin-contaminated water body in the world. In order to bring this valuable resource back to life and help revitalize the overburdened urban communities along its banks that have languished for years, we must move forward now with cleanup.

The first step in moving this cleanup forward is by releasing the Proposed Plan for public comment immediately. The proposed remedy must finally end the environmental threat to the people of New Jersey. That goal will not be achieved by re-burying millions of cubic yards of dredge material contaminated with the most toxic pollutant known to man back into the same ecosystem from which it came, namely the Newark Bay Complex.

A detailed discussion of the State of New Jersey's opposition to disposal of Passaic River sediments in a Newark Bay CAD is below:

1. A CAD for Disposal of the Required Volume and Concentration of Dioxin-contaminated Dredge Material is Unprecedented

While CAD facilities have been constructed and maintained throughout the country, those facilities have been used for disposal of far less toxic materials than the dioxin-laden sediment to be removed from the Passaic River and have also been smaller in size/scale. Such facilities, including the 2 million cubic yard Confined Disposal Facility (CDF) in Newark Bay, have been used to dispose of routine maintenance dredge only. The USACE 2007 and 1997 studies upon which the FFS technical feasibility determination is based were related to locating that CDF to manage dredge material generated from regular harbor maintenance and NOT for the disposal of the highly contaminated and unique materials from the Passaic River site.

There are several additional reasons, based on the science presented in the Focused Feasibility Study and/or Proposed Plan (received by NJDEP via email on February 12, 2014) that convince NJDEP that a CAD is not an acceptable disposal option. These documents will be collectively referred to as the FFS/PP below.

The nature of the material:

USEPA and NJDEP's preferred remedy, Alternative 3, results in removal of 4.3 million cubic yards of contaminated sediment. Based on the Remedial Investigation, these materials have been characterized to be highly contaminated, with average concentrations for key contaminants exceeding applicable criteria and goals by several orders of magnitude. Due to the observed toxic effects of TCDD (one of the most toxic substances known) on aquatic biota at very low levels, these contaminants should not be disposed of in the aquatic environment of the Newark Bay Complex. The selection of a CAD for disposal does not reduce this level of toxicity. Instead a

disposal option that reduces toxicity in the aquatic ecosystem (e.g., offsite treatment and disposal) should be selected.

Release potential:

The CAD and its cap will be designed not to fail, and they will be monitored. However, there is no detailed discussion of how monitoring will occur, who will be responsible for that monitoring, how the structural integrity of the CAD will be assured, and which agency is responsible for enforcement or in the event of a failure.

Persistence of dioxin:

Dioxins are categorized as highly persistent, bio-accumulative and toxic chemicals by USEPA. They are highly resistant to degradation from biotic or abiotic processes. Per USEPA's Draft Dioxin Reassessment document, they are "extremely stable compounds" particularly when not exposed to air or sunlight, or in this case for sub-surface sediments, water. The half-life of 2,3,7,8-TCDD in soil has been estimated from 25 to 100 years. For these reasons, NJDEP is not willing to bury this contamination in Newark Bay as it is unlikely to degrade to any appreciable extent in a reasonable timeframe.

Preference for Permanence:

For all aspects of a remedial action, NJDEP has a statutory preference for permanence, similar to the NCP and CERCLA preference for remedial alternatives employing technologies that permanently and significantly reduce the toxicity, mobility, or volume of hazardous substances. Use of a CAD does not permanently remove or reduce toxicity, mobility, or volume of hazardous substances from the water ecosystem and by extension, from the local communities. The cap of the CAD must be monitored and maintained in perpetuity.

RCRA landfill versus CAD:

It is harder to control and monitor contaminants and their potential for release from a CAD (underwater) versus an upland RCRA landfill, especially for the millions of cubic yards being considered in this project. RCRA facilities are required to have engineering controls such as double liners and other safety measures, along with real time monitoring. For a CAD, if a release were to occur, untold mass and volume of contamination may already be introduced into the water by the time it is discovered. Any release or failure of the CAD could undo improvements gained, as a result of the remedial action, in the public use of fish and crabs and could require a return to the most restrictive advisories. Given the highly toxic nature of the dredge material, the disposal facility should be sited, regulated, and managed in/as a RCRA facility.

Tidal impacts:

The Bay is tidal and along with the erosive force of tides, can be further impacted by river currents, port traffic, storm surges, and anticipated sea level rise. All of these could impact the placement of contaminated dredge material into the CAD and the integrity of its cap.

Impacts to Biota and Marine Habitat:

The disposal of Passaic River contaminated sediments in a Newark Bay CAD cell would result in additional and unnecessary handling of these sediments in the aquatic environment, and lead to increased opportunities and levels of exposure to local biota, including sensitive and state and

federally endangered species. In particular, the Atlantic sturgeon, which uses the habitat of Newark Bay, and the shortnose sturgeon are both state and federally protected, and are sensitive to the Passaic River contaminants of concern which have been shown (Chambers et al., 2012) to induce early-life-stage toxicities. Shellfish, including oyster, are especially sensitive to TCDD levels and experience adverse effects on egg fertilization and development at very low concentrations (Wintermyer and Cooper, 2003).

Winter flounder are also a species of concern and widely known to spawn in the Passaic/Newark Bay complex, with most returning repeatedly to the same spawning grounds (Lobell 1939, Salla 1961, Grove 1982 in Collette and Klein –MacPhee 2002). The construction and operation of a CAD in Newark Bay will interfere with their spawning and early life stage habitat of this and the myriad of others which reside and also use this area to spawn. Construction and operation of a CAD in Newark Bay could also impact the foraging habitat for State Threatened Black and Yellow-crown Night-heron and Osprey. Ospreys also reproduce in the area and there is a historical Night-heron nesting colony in the lower Newark Bay. A disposal option (CAD) which could impact these populations should not be considered in this area.

2. The State is the Riparian Owner of the Land Underlying the Passaic River and Newark Bay

As previously indicated in Governor Christie's November 28, 2012 letter to Administrator Jackson (attached), the State of New Jersey is the riparian owner of and natural resource trustee for all submerged lands within its territorial borders. Consequently, the State would have to approve USEPA's construction of a CAD in Newark Bay or the Passaic River through a State tidelands instrument. In addition, one of the nine criteria USEPA is required to evaluate pursuant to the NCP is State Acceptance of the remedy. Because of its serious concerns with use of a CAD in these specific circumstances and as outlined above, the State will not grant permission to USEPA to use its land held in trust for the citizens of New Jersey to dispose of sediments contaminated with the most highly toxic chemical known to man.

In addition to the technical concerns for construction and short-term maintenance of a CAD, the fact that New Jersey would be required by law to agree to maintain the CAD in perpetuity and at an unknown cost to the taxpayers of New Jersey makes a CAD a totally unacceptable approach to implementing a remedy. (See 42 U.S.C.A. Sec 9604(c)(3))

3. Administrative Infeasibility Precedent from the Hudson River Project

NJDEP objects to placement of a CAD in Newark Bay and believes this option should have been screened out in the initial evaluation due to its administrative infeasibility. Precedence for rejection based on administrative infeasibility has already been set in the context of the Hudson River dredging project, albeit for a CDF. The Hudson River Feasibility Study states that siting an upland or near-shore "CDF in the vicinity of the Upper Hudson may not be administratively feasible given local opposition to a dredged material disposal facility in this area and the need to obtain New York State Hazardous Waste Facility Siting Board approval for a new facility in New York State that is not within the Hudson River PCBs site. At the very least, administrative issues to obtain approval and to construct a near-river CDF could significantly delay implementation of any remedial action that includes this disposal option." The section concludes

that "disposal in upland or near-shore CDFs will not be retained for further evaluation because of the potential administrative infeasibility of such options." (Hudson River Feasibility Study, December 2000, Book 1 of 6, Section 4.3.8). New Jersey should not be treated differently.

4. The President's Power Under CERCLA to Use Eminent Domain

The State is aware that CERCLA extends to the President of the United States the power to acquire real property that the President determines is necessary to implement a cleanup (42 U.S.C.A. Sec. 9604(j) Acquisition of Property). Given Governor Christie's and my own opposition to use of State lands for the construction of a CAD as the disposal option for the Passaic River remediation, I must address this point in the event that USEPA is contemplating use of this provision of CERCLA to nonetheless advance use of a CAD for disposal. The acquisition power conferred on the President by CERCLA contemplates that the federal government will be working with the State, which exercises control over its own property, and does not contemplate or authorize a taking from the State. That authority is limited to those instances where the State "in which the interest to be acquired is located assures the President, through a contract or cooperative agreement or otherwise, that the State will accept transfer of the interest following completion of the remedial action." For the same reasons that the State will not voluntarily grant permission to use its riparian lands for construction of a CAD and with it, make the commitment to maintain that CAD in perpetuity, the State will also not provide the assurance mandated by CERCLA to allow the President to exercise federal acquisition of the State's lands. Therefore, as stated above, any remedy including this disposal option is not implementable.

Thank you for your attention to this most important issue for the State of New Jersey. I look forward to a prompt decision by USEPA to issue the long-awaited Focused Feasibility Study and Proposed Plan that outlines the preferred remedial alternative and disposal option discussed above that NJDEP, Region II and all other federal partner agencies strongly support.

Sincerely,



Bob Martin
Commissioner

Attachment

Cc: Judith Enck, Regional Administrator



STATE OF NEW JERSEY
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CHRIS CHRISTIE
GOVERNOR

November 28, 2012

The Honorable Lisa P. Jackson
Administrator, U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Mail Code 1101A
Washington, DC 20460

Re: State of New Jersey's Support for a Remedial Alternative for the Lower Eight
Miles of the Lower Passaic River

Dear Administrator Jackson:

As you know, the Passaic River has been at the heart of America's industrial engine for more than a hundred years, and at the same time is an important natural resource for the people of New Jersey. The Passaic runs through one of the most densely populated areas of the United States and it unfortunately remains largely unusable and presents an ongoing danger to human health and the environment. After more than 25 years of study costing millions of dollars, the Lower Passaic River remains extremely contaminated—arguably the most contaminated waterway in the country—which negatively affects human health and the environment, and which prevents the communities near the River full enjoyment of this natural resource and robs them of the same economic growth and development achieved in surrounding areas.

The goals for the State for the remediation of the Passaic River have always been to protect the health of our citizens, to provide a permanent solution to the clean-up of this waterway, to restore the environmental and economic health of the river and the surrounding communities, and to get this comprehensive clean-up started as soon as possible.

The New Jersey Department of Environmental Protection has worked closely with and assisted EPA Region 2's development of the Focused Feasibility Study (FFS) for clean-up of the Lower Eight Miles of the Passaic River. Selecting and implementing a State preferred remedy will

reduce the ongoing threat to human health and the environment and spur economic growth and revitalization along the Passaic River and throughout Northern New Jersey.

The Focused Feasibility Study evaluated three potential remedies. The potential remedy alternatives included:

- Alternative 1: No Action
- Alternative 2: Deep Dredging (removal of all fine-grained sediments)
- Alternative 3: Capping (with sufficient dredging to prevent additional flooding and to enable future navigational use in the lower 2.2 miles)

For Alternatives 2 and 3, the Focused Feasibility Study evaluated three scenarios for final disposal of the contaminated sediments. The disposal alternatives include:

- Scenario A: Confined Aquatic Disposal (CAD) in Newark Bay
- Scenario B: Off-Site Treatment and Disposal at a hazardous waste landfill
- Scenario C: Local/Regional Decontamination and Reuse

The State of New Jersey supports remedial Alternative 3 (capping with sufficient dredging to prevent additional flooding and to enable future navigational use in the lower 2.2 miles) and sediment disposal Scenario B (off-site treatment and disposal at a hazardous waste landfill).

The State has come to this position based on many factors, among them the belief that any remedial action for the Passaic River must:

- Remove as much contaminated sediment as possible in order to reduce the ongoing threat to human health and the environment by eliminating exposure to humans and animals;
- Stop the uncontrolled release and movement of contaminated sediments into Newark Bay and other parts of the estuary;
- Be consistent with reasonable long-term future uses of the Passaic River and adjacent areas, particularly its use as an important navigable waterway;
- Remove (and treat as necessary) contaminated sediments consistent with the State's Comprehensive Environmental Response Compensation and Liability Act's (CERCLA) preference for remedies which permanently and significantly reduce the volume, toxicity or mobility of hazardous substances;
- Provide for management of the waste in a manner that will not add further burden to the surrounding community's existing environmental issues; and
- Conform with New Jersey's laws and regulations.

Alternative 1 (no action) is unacceptable to New Jersey. While the State would prefer complete removal of all contaminated sediments, our position, supported by EPA's FFS, is that the capping remedy (Alternative 3) will achieve virtually the same level of protection over time from contaminated sediments in the Lower Passaic River at considerably less cost than Alternative 2 (deep dredging).

Alternative 3 also allows for reasonable future navigational use of the River. Although the navigational depths in Alternative 3 are less than those currently authorized by Congress, the depths provide a reasonable balance between long-term future uses of the River and the need for a cost-effective remediation. Furthermore, New Jersey law mandates that no net fill may be placed in the River that could cause an increase in flooding, so dredging under Alternative 3 will be sufficient to meet that requirement. This is particularly important in the Passaic River Basin, which experiences frequent and severe flooding.

Of the dredge material management options considered in the FFS, only Scenario B meets the State's objectives and goals. Off-site disposal provides the only option that permanently removes contaminated sediments from the Passaic River and the Newark Bay Complex and does not overly burden the local communities already suffering from decades of pollution.

Remedial Alternative 3 combined with disposal Scenario B also meets CERCLA's, EPA's and the State's preference for permanent treatment and reduction of hazardous substances. This course of action would significantly reduce the volume and ongoing exposure of contaminated sediments within the Passaic River and their spread to Newark Bay.

Disposal Scenario A, Confined Aquatic Disposal (CAD), likely in Newark Bay, is unacceptable to the State. As the riparian owner and trustee for the submerged lands of New Jersey, the State has an obligation to protect and preserve its submerged lands and will not agree to the use of riparian lands owned by the State for disposal of the most highly dioxin-contaminated sediments from this site.

Disposal Scenario C, which provides for local or regional decontamination and reuse, is also unacceptable to the state of New Jersey.

Under Scenario C, thermal destruction and other treatment technologies, including sediment washing, for decontamination and reuse are questionable as to their ability to treat the volume of contaminated sediments that will be removed from the Passaic River. We do agree that such treatments should be considered in conjunction with off-site disposal.

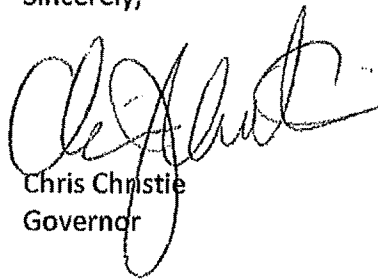
The State opposes any thermal destruction facility placed near the Passaic River or surrounding communities. This densely populated urban area is already burdened with environmental impacts, particularly from air pollutants. Urban communities near the Passaic River have suffered enough because of the contamination in the River and should not be burdened with further exposure from incineration or thermal destruction of dioxin-contaminated sediments.

Because of the extent of the contamination, any remedy selected will involve significant costs; to delay a remedy only ensures greater future costs. New Jersey believes that the cost estimates presented by EPA in the FFS provide a useful guide to comparing the remedial alternatives, but the State understands that the total cost estimates are for comparison only and that the actual costs are very likely to be higher when the remedy is implemented.

Implementing Alternative 3 and Scenario B would provide the best balance of protection and cost, and would meet the State's objectives and goals.

My Administration has worked tirelessly to ensure that New Jersey's air, water, land and natural resources are protected for the public's benefit, while simultaneously facilitating economic growth and sustainability in all business sectors. The extreme level of contamination in the sediments of the Lower Passaic River has long hindered our attainment of these objectives in that portion of the state. Not only will removal and stabilization of the uncontrolled sources substantially improve the environment, it will spur economic growth and revitalization along the Passaic River and throughout Northern New Jersey. After more than 25 years of study, the time to act is now.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Christie", is written over the printed name and title.

Chris Christie
Governor